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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|----------------------|
| 09/822,112 | 03/30/2001 | David R. Reuveni | 01-121/1496.00109 | 9191 |
| 24319 | 7590 | 03/09/2005 | EXAMINER | |
| LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035 | | | | WILLIAMS, LAWRENCE B |
| ART UNIT | | PAPER NUMBER | | |
| 2634 | | | | |

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---------------------------------|-------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/822,112 | REUVENI, DAVID R. |
| | Examiner Lawrence B Williams | Art Unit 2634 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 March 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,6,7,12-16,19 and 20 is/are rejected.
- 7) Claim(s) 3-4,8-11,17 and 18 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 4, 9 and 17-20 is withdrawn in view of the newly discovered reference(s) to applicant's co-pending application 09/821,886. Rejections based on the newly cited reference(s) follow.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1 and 2 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 09/821,886 allowed on 28 January 2005. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims disclose common subject matter. Though the application 09/821,886 does not explicitly disclose a width counter circuit, claim 1 discloses "a second digital circuit configured to generate said correction

signal and a **width signal**”, while claim 2 discloses “wherein said second digital circuit is configured to store a number of width measurements”. In light of the disclosure in claims 1 and 2 of co-pending application 09/821,866, it would be inherent that the digital circuit is “**configured to measure a width of an symbol in said input signal**” as disclosed in the present application. The remainder of the subject matter of claims 1 and 2 of the pending application are disclosed as well.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claim 5 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because though claim 2 of the co-pending application does not explicitly disclose “**a logic HIGH symbol**” or “**a logic LOW symbol**”, the claim discloses a **digital circuit** “**configured to store a number of width measurements for HIGH data symbols and a number of width measurements for LOW data symbols**”. In light of the disclosure of the digital circuit, it would be inherent that the measured symbol width measurements would represent **logic HIGH** and **logic low symbols**.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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5. Claim 6 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because though claim 5 does not explicitly disclose the correction signal comprising a High and low data signal correction it signal, it does disclose “wherein said first digital circuit is configured to adjust a **current symbol width** measurement in response to said correction signal” which would inherently encompass the limitations of claim 6 of the pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 9 teaches generation of the “correction signal in response to a comparison between a number of stored HIGH width measurements and a number of stored LOW width measurements” as disclosed in claim 7 of the pending application along with the remaining limitations of the claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claim 12 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 4 of the co-pending applications discloses the apparatus as taught in claim 12 of the pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claim 13 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 13 of the pending application is simply the method of the apparatus as taught in claim 5 of co-pending application 09/821,886.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claim 14 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 09/821,886. Although claim 5 does not explicitly disclose “**detecting an edge of said symbol in said input signal**”, it would be inherent that the symbol edges would have to be detected in order to determine the width of the data symbol.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claim 15 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 09/821,886 because claim 1 teaches that the plurality of input samples of an input signal are presented in response to a plurality of phases of a reference clock. It would be inherent to one skilled in the art at the time of invention that the edges position would be determined with respect to at least one of the plurality of phases.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claim 16 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 6 of copending Application No. 09/821,886 because claim 6 teaches the “circuit is configured to store said width measurements in order of relative length”.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claim 19 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct

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from each other because claim 19 of the co-pending application discloses the method for generating a calculated bit width based on a plurality of adjusted symbols lengths.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claim 20 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of copending Application No. 09/821,886. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 16 discloses generating an output signal (correction signal) in response to said input signal and said calculated bit width.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

14. Claims 3-4, 8-11, 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw
March 1, 2005

Amandate
AMANDA T. LE
PRIMARY EXAMINER